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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,089	03/16/2006	Jean-Yves Le Naour	PF030146	9287

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Joseph J. Laks
Thomson Licensing LLC
2 Independence Way, Patent Operations
PO Box 5312
PRINCETON, NJ 08543

EXAMINER	
SAFAIPOUR, BOBBAK	
ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/572,089	LE NAOUR ET AL.	
	Examiner	Art Unit	
	BOBBAK SAFAIPOUR	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6 and 8-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5-6, 8-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Action is in response to Applicant's response filed on 7/30/2008. Claims 2-4, 7, and 12 have been cancelled. **Claims 1, 5-6, and 8-11** are still pending in the present application.

This action is made FINAL.

Response to Arguments

Applicant argues that neither Ammar nor Birleson, alone or in combination, discloses a "configurable rejection filter [which] comprises a guided structure, wherein the cover of said guided structure transforms said configurable rejection filter into one of a band rejection filter that rejects a bandwidth corresponding to a leak of the transposition frequency or into a non-filtering element," as described in currently amended claim 1.

The Examiner respectfully disagrees. Taking a closer look at figure 1, Birleson clearly discloses that mixer 103 receives inputs from amplifier 102 and local oscillator 104. A first IF signal is generated in mixer 103 and provided to first IF filter 109 (read as configurable rejection filter). Filter 109 is a band pass filter that provides coarse channel selection in tuner 10. As a matter of design choice, filter 109 may be constructed on the same integrated circuit substrate as mixers 103 and 110 or filter 109 may be a discrete off-chip device. Filter 109 selects a narrow band of channels or even a single channel from the television signals in the first IF signal. Following IF filter 109 (read as configurable rejection filter), mixer 110 mixes the first IF signal with a second local oscillator signal from local oscillator 111 to generate a second IF signal (read as transforms into a non-filtering element). Mixer 110 may be an image rejection mixer, if necessary, to reject unwanted image signals. The characteristics of first IF filter 109 will determine whether mixer 10 must provide image rejection. If the image frequencies of the

desired channel are adequately attenuated by first IF filter 109, then mixer 110 may be a standard mixer. (figure 1; paragraphs 50-52)

If the Applicant intends to differentiate between the non-filtering element of the present application and the mixer 110 of the Birleson reference, then such differences should be made explicit in the claims. As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 5-6, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ammar et al (US Patent Application Publication #2004/0203528 A1)** in view of **Birleson (US 2007/0182866 A1; hereinafter Birleson).**

Consider **claim 1,** Ammar et al disclose outdoor unit (abstract, paragraphs 39-49, figure 2) of a reception terminal including a return channel, wherein the return channel comprises: a transposition means (read as mixer) that transposes a signal to be transmitted using the signal provided by the local oscillator (figure 2; paragraph 41; The signal is mixed at a mixer with the local oscillator), and a wideband filtering means that allows through signals whose frequency corresponds to the transposed signal independently from the frequency of the local oscillator (paragraph 41; a band pass filter eliminates certain spurious frequencies and signals by appropriate filtering)

Ammar et al fail to disclose a local oscillator providing a signal with a frequency that can be selected from at least two frequencies and a configurable rejection filter depending on the frequency selected for the local oscillator, wherein the configurable rejection filter comprises a guided structure, wherein the cover of said guided structure transforms said configurable rejection filter into one of a band rejection filter that rejects a bandwidth corresponding to a leak of the transposition frequency or into a non-filtering element.

In related art, Birleson discloses a local oscillator providing a signal with a frequency that can be selected from at least two frequencies (figure 1, local oscillators 104 and 111; paragraph 53) and a configurable rejection filter depending on the frequency selected for the local oscillator (paragraphs 51-52; read as filter 109) wherein the configurable rejection filter comprises a guided structure, wherein the cover of said guided structure transforms said configurable rejection filter into one of a band rejection filter that rejects a bandwidth corresponding to a leak of the transposition frequency or into a non-filtering element (read as mixer 110) (figure 1; paragraphs 50-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Birleson into the teachings of Ammar et al so that the local oscillator frequencies are selected so that the picture carrier of a particular channel in the RF signal will appear at 45.75 MHz in the second IF signal, although it is not limited to specific IF or LO frequencies.

Consider **claim 11,** Ammar et al disclose outdoor unit (abstract, paragraphs 39-49, figure 2) of a reception terminal including a return channel, wherein the return channel comprises: a transposition means (read as mixer) that transposes a signal to be transmitted using the signal provided by the local oscillator (figure 2; paragraph 41; The signal is mixed at a mixer with the local oscillator), and a wideband filtering means that passes the signal from said transposition means resulting from selection of any of said at least two local oscillator frequencies (paragraph 41; a band pass filter eliminates certain spurious frequencies and signals by appropriate filtering)

Ammar et al fail to disclose a local oscillator providing a signal with a frequency that can be selected from at least two local oscillator frequencies and a configurable rejection filter for rejecting a leak of transposition frequency for at least one of said at least two local oscillator frequencies, wherein the configurable rejection filter is configured through placement of a cover on a waveguide.

In related art, Birleson discloses a local oscillator providing a signal with a frequency that can be selected from at least two frequencies (figure 1, local oscillators 104 and 111; paragraph 53) and a configurable rejection filter for rejecting a leak of transposition frequency for at least one of said at least two local oscillator frequencies (paragraphs 16-17 and 51-52; read as filter 109) wherein the configurable rejection filter is configured through placement of a cover on a waveguide (paragraphs 16-17 and 51-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Birleson into the teachings of Ammar et al so that the local oscillator frequencies are selected so that the picture carrier of a particular channel in the RF signal will appear at 45.75 MHz in the second IF signal, although it is not limited to specific IF or LO frequencies.

Consider **claim 5**, and **as applied to claim 1 above**, Ammar et al, as modified by Birleson, disclose the claimed invention wherein the local oscillator comprises means for selecting the oscillation frequency. (Birleson: figure 1; paragraph 53)

Consider **claim 6**, and **as applied to claim 5 above**, Ammar et al, as modified by Birleson et al, disclose the claimed invention wherein the means for selecting the oscillation frequency is either a manual switch or a command from an indoor unit or terminal. (Birleson: figure 1; paragraph 53)

Consider **claim 8**, and **as applied to claim 7 above**, Ammar et al, as modified by Birleson et al, disclose the claimed invention wherein the cover comprises one of a flat cover, or a cover including slot-coupled resonant cavities (Ammar et al: paragraph 90) such that said cover transforms the configurable rejection filter into a band rejection filter for rejecting a bandwidth corresponding to a leak of the transposition frequency in the wideband (Birleson: paragraphs 16-17).

Consider **claim 9**, and **as applied to claim 7 above,** Ammar et al, as modified by Birleson et al, disclose the claimed invention wherein the cover comprises one of a flat cover or a cover having a plurality of profiled elements such that said cover transforms the configurable rejection filter into a band rejection filter for rejecting a bandwidth corresponding to a leak of the transposition frequency in the wideband. (Birleson: paragraphs 16-17)

Consider **claim 10**, and **as applied to claim 7 above,** Ammar et al, as modified by Birleson et al, disclose the claimed invention wherein the cover comprises a flat cover such that said cover transforms the configurable rejection filter into a band rejection filter for rejecting a

bandwidth corresponding to a leak of the transposition frequency in the wideband. (Birleson: paragraphs 16-17)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Bobbak Safaipour/

Examiner, Art Unit 2618

November 20, 2008

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618